

# Do-Now: Setting Learning Targets

Find the worksheet in your packet and respond to the following questions:



**READY** What experiences have made you **READY** to learn more about using data to improve instruction?



**AIM** What do you **AIM** to learn in this session about using data?



**SHOOT** What improvements are you going to **SHOOT** for as a result of what you learn?



**MINT**  
**Using Data to**  
**Target**  
**Instruction**

**Miami-Dade County Public Schools**  
**Office of Professional Development**

# AGENDA

- **Norms**
- **Objectives**
- **Choice Activity**
- **Florida Educator Accomplished Practices**
- **Review of Data Resources**
- **Linking Assessment and Instruction**
- **Concepts in Assessment and Data Analysis**
- **Learning Styles and Multiple Intelligences**
- **Differentiation**
- **Wrap-Up and Debrief**

# **NORMS**

**L**imit cell phone calls, messaging, and texting to break times, please

**E**ngage actively in the learning process

**A**sk questions if something's not clear to you

**R**espect self and others

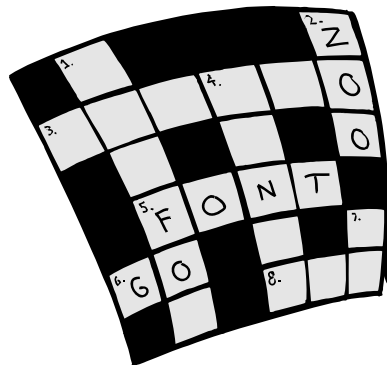
**N**eed help? Just ask!

# Objectives

- Apply data analysis strategies to identify areas of strength and weakness and set instructional priorities
- Integrate multiple sources of data into instructional decision-making
- Incorporate formal and informal assessment strategies into instructional planning and delivery
- Use pre-assessment, ongoing feedback, and progress monitoring to adapt instruction to meet learner needs

# CHOOSE WISELY:

Pick 2 Out of 3



**CROSSWORD**

<b>TIC</b>		
	<b>TAC</b>	
		<b>TOE</b>

<b>B</b>	<b>I</b>	<b>N</b>	<b>G</b>	<b>O</b>
		<b>X</b>		
			<b>X</b>	
<b>X</b>	<b>X</b>			
				<b>X</b>

# B-I-N-G-O

- Throughout the lesson, you will have an opportunity to complete the tasks listed on the Bingo Card.
- As you complete each task, write in the corresponding space.
- You will have achieved a “BINGO” when the spaces corresponding to the tasks you complete form a line of five-in-a-row: this may be horizontal, vertical, or diagonal.

# TIC-TAC-TOE

- **All participants must complete the center activity.**
- In addition, each participant must complete at least **THREE (3) ACTIVITIES IN A ROW** to make Tic-Tac-Toe.
- **Identify how you will:**
  - **A) DIFFERENTIATE** the content, process, or product in order to address the specific needs of the learners in your identified group who learn through that type of intelligence **and**
  - **B) ASSESS** the learning.
- Be specific!



# CROSSWORD

Directions: On the “*Linking Assessment and Instruction*” Crossword handout:

- Complete the puzzle
- When you have completed it, bring it up to the instructor to get the answer key
- Check your own work!

# Making Sense of the Data

## DATA

- **Collecting**
- **Organizing**

## INFORMATION

- **Summarizing**
- **Analyzing**

## KNOWLEDGE

- **Synthesizing**
- **Decision-Making**

**FLORIDA  
EDUCATOR  
ACCOMPLISHED  
PRACTICES**

# Florida Educator Accomplished Practices Rule 6A-5.065

## **4. Assessment.** The effective educator consistently:

- a. Analyzes and applies data from multiple assessments and measures to diagnose students' learning needs, informs instruction based on those needs, and drives the learning process;
- b. Designs and aligns formative and summative assessments that match learning objectives and lead to mastery;
- c. Uses a variety of assessment tools to monitor student progress, achievement and learning gains;
- d. Modifies assessments and testing conditions to accommodate learning styles and varying levels of knowledge;
- e. Shares the importance and outcomes of student assessment data with the student and the student's parent/caregiver(s); and
- f. Applies technology to organize and integrate assessment information.

# Educator Accomplished Practices Rule 6A-5.065

## 2a(1)

- d. Selects appropriate formative assessments to monitor learning;
- e. Uses a variety of data, independently, and in collaboration with colleagues, to evaluate learning outcomes, adjust planning and continuously improve the effectiveness of the lessons; and
- f. Develops learning experiences that require students to demonstrate a variety of applicable skills and competencies.

“The purpose of **assessment**  
in instruction is **improvement.**”

Richard Paul and Linda Elder  
White Paper – Consequential Validity:  
Using Assessment to Drive Instruction

# **REVIEW OF DATA RESOURCES**

# What Data Do We Have?

**Summative Data – “snapshot” of outcomes**

**Assessment **OF** learning**

- FCAT
- End-of-course exams

**Formative Data – “progress reports”**

**Assessment **FOR** learning**

- Interim Assessments
- FAIR



# What Data Do We Have?

## State Assessment results (FCAT)

- Snapshot – only once a year.
- Aligned with state standards
- Reading, Mathematics, Writing, and Science
- DSS allows longitudinal comparison in Reading and Mathematics.

# Florida Assessment for Instruction in Reading (FAIR)

- Multiple administrations: Fall, Winter, and Spring
- Reports through PMRN
- Focus interventions on identified needs

# **M-DCPS EDUCATOR'S PORTAL**

**[www.dadeschools.net](http://www.dadeschools.net)**

# **PMRN / FAIR**

**<http://www.fcrr.org/FAIR/index.shtm>**

# **Edusoft**

**[www.edusoft.com](http://www.edusoft.com)**

# **Sources of additional data**

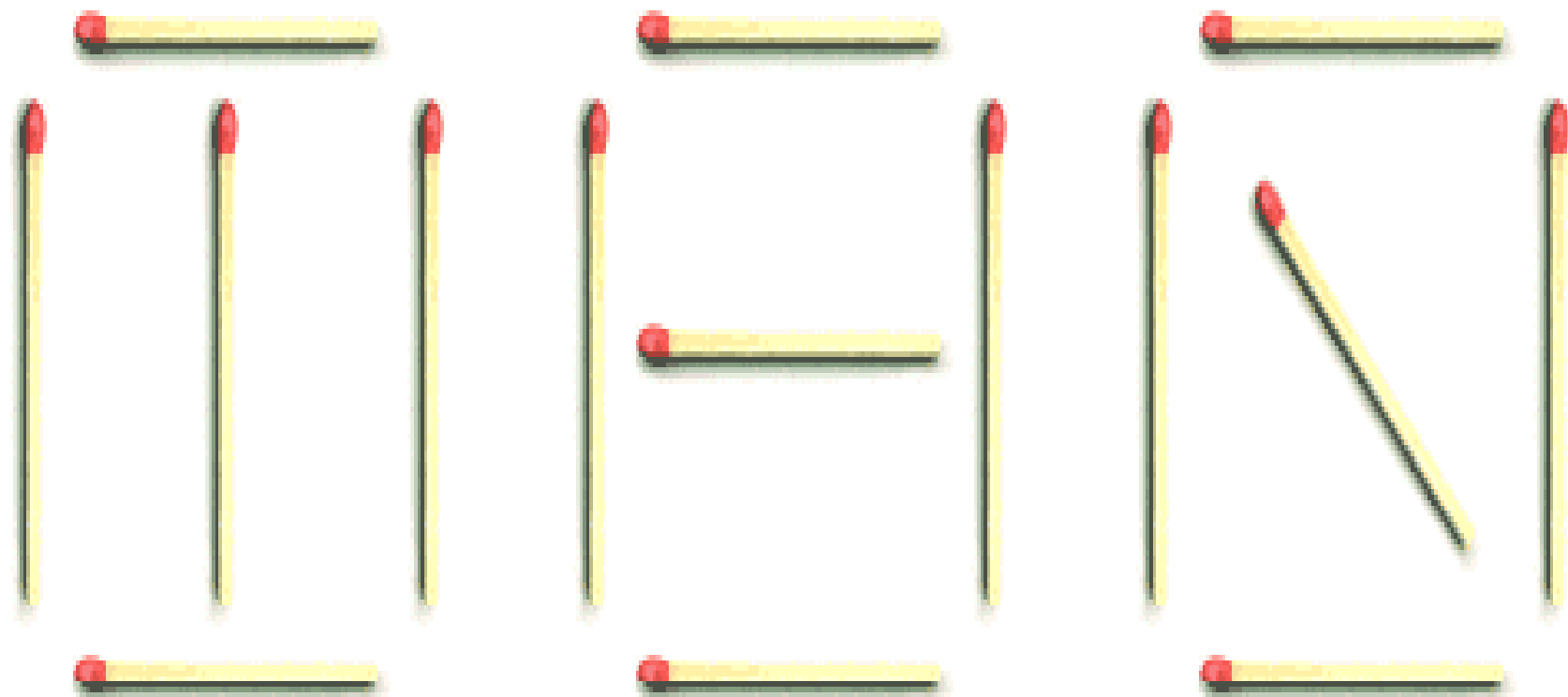
- **current progress monitoring results**
- **previous and current interim assessment results**
- **current classroom assessments**
- **grouping or treatment data**
- **student work samples**

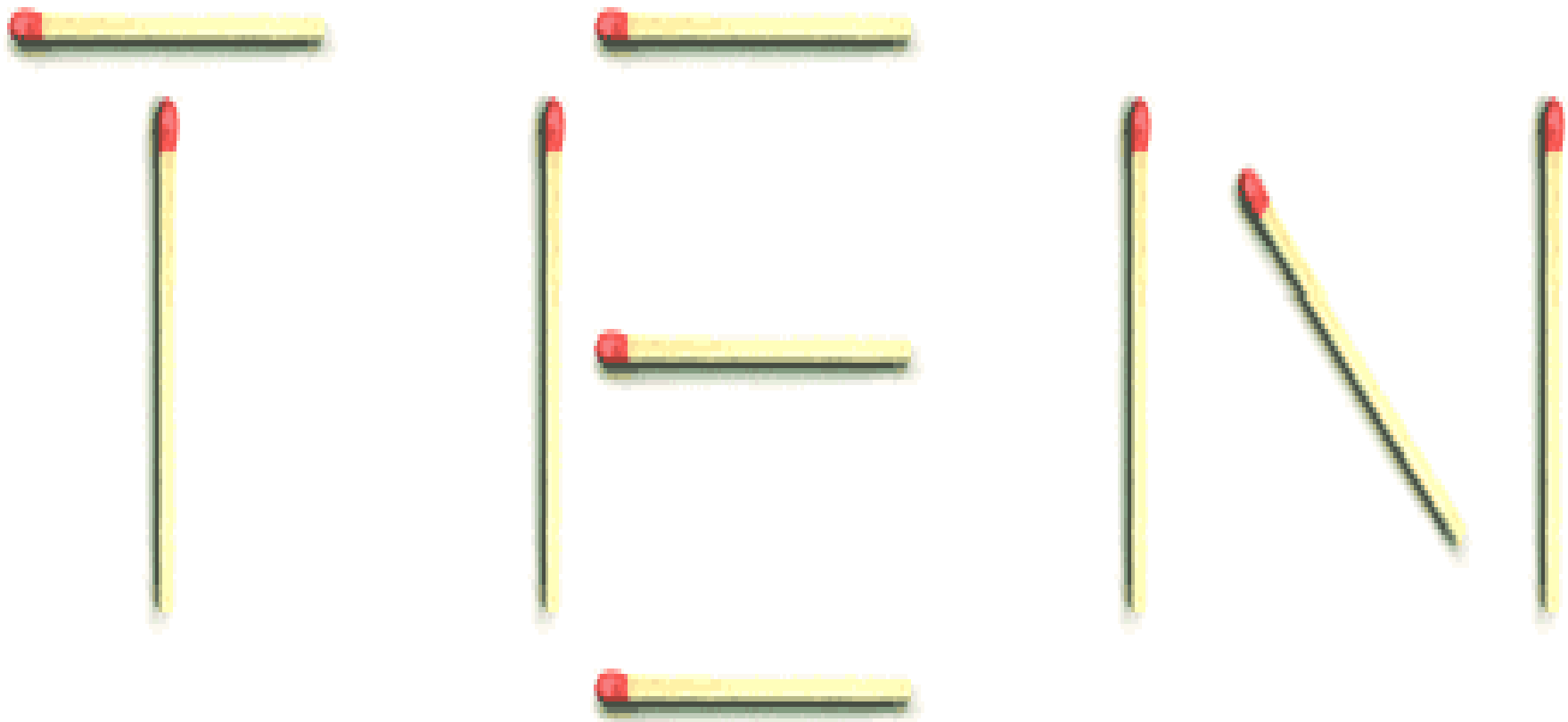
# ACTIVITY: Data Search

- Log into your chosen data source (MDCPS portal, PMRN, Edusoft, etc.).
- Explore the available reports.
- Identify at least two (2) potential areas of concern based on your data.
- Take notes using the Data Observation sheet of your choice.
- Think about a possible cause for each and a potential action for each.
- Share and discuss with your elbow partner.

## 5. TEN MATCHES:

Remove six matches to make ten. [solution](#)





[http://www.expandyourmind.com/logicproblems/logic\\_puzzles.shtml](http://www.expandyourmind.com/logicproblems/logic_puzzles.shtml)

# **CONCEPTS IN ASSESSMENT AND DATA ANALYSIS**



# **Assessment**

**Involves trade-offs and balances in design and implementation**

- Standards to be assessed in testing and reporting**
- Test length vs. time constraints**
- Format options vs. cost/scoring efficiency**
- Purpose: formative vs. summative**
- Criterion-referenced vs. norm-referenced**

# Assessment

- **Influences student motivation and learning**  
*(What gets measured gets improved. Peter Drucker)*
- **Contains potential for error**
- **Serves to inform and improve instruction**
- **Must be reliable and valid**
- **Must be fair and ethical**
- **Should use multiple methods to compile a picture of performance**

# Formative Assessment\*

- **Assessment FOR learning**
- **Systematic process to gather evidence about learning**
- **Students as active participants**
- **Three Types of Strategies:**
  - **On-the-fly assessment**
  - **Planned-for interaction**
  - **Curriculum-embedded assessment**

\* From *Formative Assessment: What Do Teachers Need to Know and Do?*  
Margaret Heritage, Phi Delta Kappan Magazine  
[http://www.pdkintl.org/kappan/k\\_v89/k0710her.htm](http://www.pdkintl.org/kappan/k_v89/k0710her.htm)

# Four Elements of Formative Assessment\*

- **Identifying the “gap”**
- **Feedback**
- **Student Involvement**
- **Learning Progression**

\* From *Formative Assessment: What Do teachers Need to Know and Do?*  
Margaret Heritage, Phi Delta Kappan Magazine  
[http://www.pdkintl.org/kappan/k\\_v89/k0710her.htm](http://www.pdkintl.org/kappan/k_v89/k0710her.htm)

# Resources for Educators

<http://www.eduplace.com/>

(Houghton Mifflin Harcourt)

<http://balancedassessment.concord.org/index.html>

(Balanced Assessment in Mathematics project resources, Harvard University)

<http://free.ed.gov/>

(FREE Federal Resources for Educational Excellence)

# Some Useful Resources on the Web

- **Intel Education K-12 Resources**  
<http://www.intel.com/about/corporateresponsibility/education/k12/index.htm>
- **FLORIDA EDUCATORS ACCOMPLISHED PRACTICES**  
<http://www.fldoe.org/profdev/FEAPSRevisions/pdf/6A-5.065.pdf>
- **NATIONAL MIDDLE SCHOOL ASSOCIATION**  
<http://www.nmsa.org/publications/webexclusive/assessment/tabid/1120/default.aspx>

# The “21<sup>st</sup> Century Skills”

- Creativity and Innovation
- Critical Thinking and Problem Solving
- Communication and Collaboration
- Information Literacy
- Media Literacy
- ICT (Information, Communication, and Technology) Literacy
- Flexibility and Adaptability
- Initiative and Self-Direction
- Social and Cross-Cultural Skills
- Productivity and Accountability
- Leadership and Responsibility

Source: <http://www.intel.com/education/video/assess/content.htm>

**“Data is relationships...the more things you have to connect together, the more powerful it is.”**

***Tim Berners-Lee, inventor of the World Wide Web***

From the TED talk available at:

[http://www.ted.com/talks/lang/eng/tim\\_berniers\\_lee\\_on\\_the\\_next\\_web.html](http://www.ted.com/talks/lang/eng/tim_berniers_lee_on_the_next_web.html)

The first webpage ever - <http://info.cern.ch/>



# The moving picture...

“...to be valuable for instructional planning, assessment needs to be a moving picture -- a video stream rather than a periodic snapshot.”

“

“Formative assessment practices, if implemented effectively, can provide teachers and their students with the data that they need.”

Margaret Heritage

**Excerpted from: Formative Assessment: What Do Teachers Need to Know and Do? 2010 Kappan Magazine**

“Assessment should not only serve as an external evaluation and public conscience for higher education institutions; at the very least, it also should do no harm to instruction, and, at best, it should guide, support, and enrich it. When we embed assessment in instruction, it is much more likely that what is assessed will contribute to and be compatible with the core objectives of instruction.”

*Lee S. Shulman, eighth president of the Carnegie Foundation for the Advancement of Teaching*

[http://www.unr.edu/assess/AssessmentMattersFiles/LeeShulman\\_Change\\_07.pdf](http://www.unr.edu/assess/AssessmentMattersFiles/LeeShulman_Change_07.pdf)

# **LINKING ASSESSMENT AND INSTRUCTION**

# Aligning Instruction and Assessment

How do you know....

- what students know and don't know?
- how ready students are for the new learning?
- what students' interests are and how to engage them?
- how effective prior instruction has been?

“Observing and assessing student performance helps teachers understand...

- **What to teach**  
and
- **Where to begin instruction.”**

From *Differentiating Instruction: Guidelines for Implementation*  
Gibson Hasbrouck and Associates [www.gha-pd.com](http://www.gha-pd.com)

# Targeting Instruction to Meet Student Needs: The Essential Question



**“WHICH STUDENTS?”** not **“HOW MANY STUDENTS?”**



# So, how do you do that?

- Formal assessment
  - Standardized tests
  - Exams
  - Rubrics
- Informal assessment
  - Embedded
  - Scheduled or “on-the-fly”
  - Exit slips
- Passive capture -analyzing patterns of success and error in student work

# It's All About...Activity

## *Directions:*

Find the It's All About \_\_\_\_\_ Worksheet in your packet. On a scale of 1 to 5, indicate how much you like each of the items on the list. If you have a favorite activity in the category, write it in the space provided.

**1-Not at all   2-A little   3-Somewhat   4-Generally/Usually   5-Very much/Always**

**Prepare to share!**



# Pre-assessment

“A **preassessment** can be a quiz, game, discussion, or other activity that asks students to answer some of the questions that would be used to evaluate their performance at the end of an upcoming unit or lesson. It may also be in the form of a learning inventory, such as a Multiple Intelligences inventory ... so the teacher will be able to determine how students within the class prefer to learn.”

# Authentic Assessment

A form of assessment in which students are asked to perform real-world tasks that demonstrate meaningful application of essential knowledge and skills -- Jon Mueller

# Authentic Assessment Activity

Authentic assessment requires a task for students to perform and a rubric by which their performance on the task will be evaluated.

**Work with your group** to identify forms of authentic assessment that you have experienced or used and how you could incorporate authentic assessment in your classroom?

**Prepare to share!**

# Learning from errors

Failures are finger posts on the road to achievement.

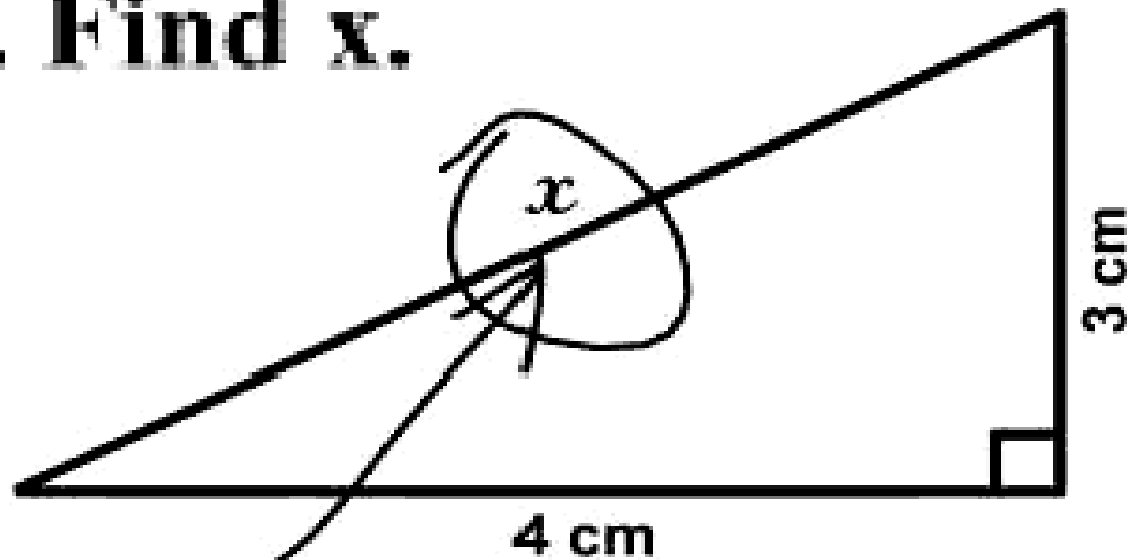
C. S. Lewis

Success is falling nine times and getting up ten.

Jon Bon Jovi

Look for misunderstandings  
or errors in student work

**3. Find  $x$ .**



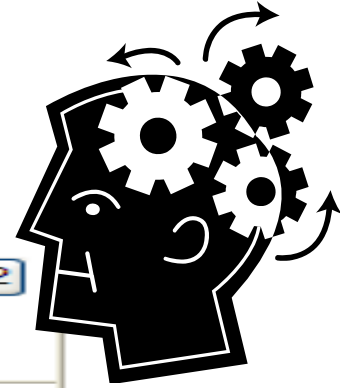
*Here it is*

Rob Kyff (Wordguy@aol.com)

The amount of grammer and usage error's today is astounding. Not to mention spelling. If I was a teacher, I'd feel badly that less and less students seem to understand the basic principals of good writing. Neither the oldest high school students nor the youngest kindergartner know proper usage. A student often thinks they can depend on word processing programs to correct they're errors. Know way!

Watching TV all the time, its easy to see why their having trouble. TV interferes with them studying and it's strong affect on children has alot to due with their grades. There's other factors, too, including the indifference of parents like you and I. A Mom or Dad often doesn't know grammer themselves. We should tell are children to study hard like we did at they're age and to watch less TV then their classmates.

# Brain Warm-up



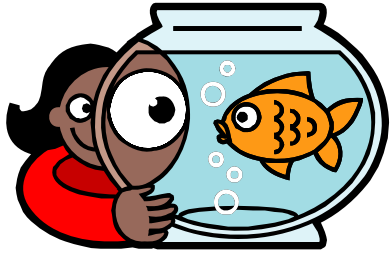
1	musically	pay	2
3	LEAST	IT	4
5	thought <sup>but</sup> thought	purposes purposes	6
7	MILL1ON	another one thing	8
9	par two	D R A H	10
11	100 94	history history history	12

From: <http://www.rwmarketing.com/news/vispun.html>

# **LEARNING STYLES AND MULTIPLE INTELLIGENCES**



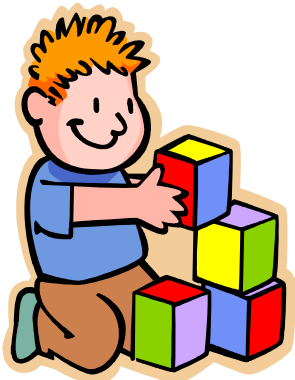
# Learning Styles



Visual



Auditory



Kinesthetic

What learning style is this?

**Who speaks, sows;**

**Who listens, reaps.**

**— Argentine Proverb**

What learning style is this?

**"You learn when you listen.  
You earn when you listen—  
not just money, but  
respect."**

**— Harvey Mackay**

What learning style is this?

What other people may find  
in poetry or art museums, I  
find in the flight of a good  
drive.

Arnold Palmer, golfer

What learning style is this?

"I hear, and I forget.

I see, and I remember.

I do, and I understand." –

Confucius

# What learning style is this?

Your vision will become clear only when you can look into your own heart. Who looks outside, dreams; who looks inside, awakes.

Carl Jung

What is art but a way of seeing?

Saul Bellow

What learning style is this?

Nothing is more  
revealing than  
movement.

Martha Graham, dancer

What learning style is this?

“A picture is worth a  
thousand words”

Frederick R. Barnard



# What learning style is this?

Body language is a very powerful tool. We had body language before we had speech, and apparently, 80% of what you understand in a conversation is read through the body, not the words.

Deborah Bull, dancer

What learning style is this?

The commonality between science and art is in trying to see profoundly - to develop strategies of seeing and showing.

Edward Tufte

# Gardner's Multiple Intelligences

- Logical-Mathematical



- Musical



- Spatial



- Interpersonal



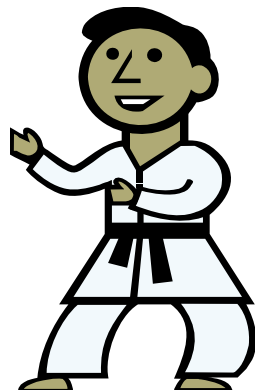
- Linguistic



- Intrapersonal



- Bodily-Kinesthetic



- Naturalistic



# Paper Airplane

- <http://www.collegesuccess1.com/VideoClips.htm>

[http://www.simpletruths.com/movie\\_landings/landings.php?banner=ppap&us=1430&ca=227&au=382&intl=295](http://www.simpletruths.com/movie_landings/landings.php?banner=ppap&us=1430&ca=227&au=382&intl=295)

# Some Resources on Multiple Intelligences

- <http://www.edutopia.org/multiple-intelligences-learning-styles-quiz>
- [http://www.spannj.org/BasicRights/appendix\\_b.htm#test](http://www.spannj.org/BasicRights/appendix_b.htm#test)
- [http://www.collegesuccess1.com/InstructorManual4thEd/Learning%20Style/MI\\_quiz.pdf](http://www.collegesuccess1.com/InstructorManual4thEd/Learning%20Style/MI_quiz.pdf)
- [http://www.cteresource.org/featured/differentiated\\_instruction.html](http://www.cteresource.org/featured/differentiated_instruction.html)
- <http://www.learnmoreindiana.org/NEEDTOKNOW/Pages/LearningStyles.aspx>

**I forget what I was  
taught,**

**I only remember what  
I've learnt.**

**Patrick White, Writer and  
1973 Nobel Prize winner for literature**

# **DIFFERENTIATION**

# What is Differentiated Instruction?

The process of “ensuring that **what** a student learns, **how** he/she learns it, and how the student **demonstrates** what he/she has learned is a match for that student’s **readiness level**, **interests**, and **preferred mode of learning**”.

Carol Anne Tomlinson



# Differentiation of

- **Content** -What the students learn
- **Process** -Activities used to assist the learning
- **Products**- Demonstration of learning

Based on students':

- **Readiness** -Student's academic standing
- **Learning profile**-How student learns
- **Interest**

# Some DI Resources

- [http://www.cteresource.org/featured/differentiated\\_instruction.html](http://www.cteresource.org/featured/differentiated_instruction.html)
- <http://www.learnerslink.com/templates.htm>
- [http://www.appomattox.k12.va.us/acps/attachments/6612\\_dan\\_mulligan\\_handout.pdf](http://www.appomattox.k12.va.us/acps/attachments/6612_dan_mulligan_handout.pdf)

# Differentiated Instruction

Well -organized and planned

A combination of whole group, small group, and individual instruction.

Emphasizing quality work over quantity work.

Data-based – planned and created through assessment.

Accommodate multiple intelligences through multiple strategies.

Student-centered based on active learning

Students create their own knowledge and understanding

# Anchor Activities

Anchor activities provide meaningful work for students to work on in "ragged time" that tie into the content and instruction.

[http://www.floridahotteachers.org/anchor\\_activities.htm#Brain%20Booster%20Resources](http://www.floridahotteachers.org/anchor_activities.htm#Brain%20Booster%20Resources)

# Some Considerations for Anchor Activities

- When will all students have time to work on the activity(ies)?
- At what point must the Activity be totally completed?
- Are there checkpoints for progress?
- Will students get feedback along the way? How?
- Will the Anchor Activity be used for a grade? How?
- If graded, what are the standards?
- What are the PROCEDURES if students need help?

# Classroom Assessment/ Embedded Assessment/ Checks for Understanding Activity

What are some ways you can monitor students' learning ?

<http://www.ntlf.com/html/lib/bib/assess.htm>

“It is better to know  
how to learn than to  
know.”

— Dr. Seuss

# **WRAP-UP AND DEBRIEF**



# **HOMEWORK: Apply the Learning**

- 1. Read the article *Formative Assessment: What Do Teachers Need to Know and Do?* by Margaret Heritage**
- 2. Write a reflection regarding how, and to what degree, you incorporate the four elements of formative assessment delineated in the paper into your professional practices in your classroom. Please indicate what subject(s) and grade level(s) you teach, and your teaching experience.**
- 3. Submit your homework by the due date by email to [afvicaria@dadeschools.net](mailto:afvicaria@dadeschools.net).**

# Reflection

Find the worksheet in your packet and respond to the following questions:



**HIT**

What **HIT** you most from what you learned today?



**YOUR**

How will you apply the learning in **YOUR** work?



**TARGET**

What is the first thing you will do when you get back to your class to **TARGET** instruction to meet students' needs?

# Any Questions?



"He always allows time for questions. Someday he'll allow time for answers."

# **CONTACT INFORMATION**

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